



Work Plan for Avista's 2023 Electric Integrated Resource Plan

**For the
Technical Advisory Committee,
Washington Utilities and Transportation Commission,
&
Idaho Public Utility Commission**

December 8, 2022 (update)

2023 Electric Integrated Resource Planning (IRP) Work Plan

This plan outlines the process Avista will follow to develop its 2023 Electric IRP for filing with the Washington and Idaho Commissions by June 1, 2023¹. This plan serves as the two-year IRP progress report for Washington and the required IRP in Idaho. Avista uses a transparent public process to solicit technical expertise and feedback throughout the development of the IRP through a series of Technical Advisory Committee (TAC) meetings and public outreach to ensure its planning process considers stakeholder input prior to Avista's decisions on how to meet customer electric needs.

The 2023 IRP process will be similar to those used to produce the previous IRPs and will incorporate any resource acquisitions from the 2022 All Source Request for Proposals (RFP) and meet capacity requirements as set by the proposed Western Power Pool's Western Resource Adequacy Program. The IRP process intends to follow the RFP schedule for resource acquisition to guide consistency between the RFP and the IRP. Exhibit 1 shows the planned 2023 IRP timeline for work products. Avista plans to use Aurora for electric market price forecasting, resource valuation and for conducting Monte-Carlo style risk analyses of the electric marketplace. Aurora modeling results will be used to select the Preferred Resource Strategy (PRS) and alternative scenario portfolios using Avista's proprietary PRiSM model. This tool fills future capacity and energy (physical/renewable) deficits while accounting for environmental laws and regulations using least cost techniques. Qualitative risk evaluations involve separate analyses. Avista plans to add a new analysis in the 2023 IRP to evaluate market risk given the lower reliability metrics created by a regional coordinated resource adequacy standard and is currently evaluating which model to use for this analysis. Avista contracted with Applied Energy Group (AEG) to conduct energy efficiency and demand response potential studies. Lastly, Avista plans to utilize results from its non-energy impact study by DNV to develop its resource plan and improve customer benefit indicators for Washington customers.

Avista intends to use both detailed site-specific and generic resource assumptions in the development of the 2023 IRP. The assumptions will utilize Avista's research of similar generating technologies, engineering studies, generalized RFP results, and the Northwest Power and Conservation Council's studies to estimate resource costs. Avista will rely on publicly available data to the maximum extent possible and provide its cost and operating characteristic assumptions for review by stakeholders. The IRP may model certain resources as Power Purchase Agreements (PPA) rather than Company owned because these third party provided resources are more likely to be lower cost. Avista will not model potential contracts with existing regional resources.

Avista intends to create a PRS using market and policy assumptions based final rules from the Clean Energy Transformation Act (CETA) and the Climate Commitment Act (CCA) for Washington and using the least cost planning methodology in Idaho. The plan will also include a

¹ Avista proposes to file a request with the Idaho PUC to extend the IRP filing from April 1, 2023 to June 1, 2023. Further, Avista is currently discussing options to meet the WUTC requirement to file a progress report on January 1, 2023.

chapter outlining the key components of the Preferred Resource Strategy with a description of which state policy is driving each resource need. The IRP will include a limited number of scenarios to address alternative futures in the electric market and public policy, such as electrification of the transportation and buildings. TAC meetings help determine the underlying assumptions used in the IRP including market scenarios and portfolio studies. Although, Avista will also engage customers using a public outreach and informational event as well as providing transparent information on the IRP website. The IRP process is technical and data intensive; public comments are encouraged as timely input and participation ensures inclusion in the process resulting in a plan submitted according to the proposed schedule in this Work Plan. Avista will make all data available to the public *except* where it contains market intelligence or proprietary information. The planned schedule for this data is shown in Exhibit 2. Avista intendeds to release slides and data five days prior to its discussion at Technical Advisory Committee meetings and expects any comments within two weeks after the meeting.

The following topics and meeting times may change depending on the availability of presenters and requests for additional topics from the TAC members. The timeline and proposed agenda items for TAC meetings follows:

- **TAC 1: Wednesday, December 8, 2021:**
 - 2021 IRP Action Item Review,
 - Summer 2021 Heat Event Review,
 - Draft NWPP Resource Adequacy Program Overview,
 - Resource Adequacy Program Impact to the IRP,
 - IRP Resource Adequacy/Resiliency Planning Discussion,
 - TAC Survey Results and Discussion,
 - Washington State Customer Benefit Indicators,
 - 2023 IRP Workplan.

- **TAC 2: Tuesday, February 8, 2022:**
 - Process Update,
 - Demand and Economic Forecast,
 - Preliminary Load & Resource Balance.

- **TAC 3: Wednesday, March 9, 2022:**
 - Preliminary Natural Gas Market Overview and Price Forecast,
 - Preliminary Wholesale Electric Price Forecast,
 - Non-Energy Impact Study (DNV),
 - Existing Resource Overview.

- **TAC 4: August 10, 2022: 9:00am to 2:00pm (PST)- Remote Only²**
 - Conservation Potential Assessment (AEG),
 - Demand Response Potential Assessment (AEG),
 - Clean Energy Customer Survey.

² Natural Gas CPA 1:45pm to 3:00pm (PST)

- **TAC 5: September 7, 2022: 8:30am to 2:00pm (PST)- Remote Only**
 - IRP Generation Option Transmission Planning Studies,
 - Distribution System Planning Within the IRP,
 - Western Resource Adequacy Program Update.
 - Social Cost of Greenhouse Gas for energy efficiency (WA only),
 - Washington Avoided Cost Rate Methodology.

- **TAC 6: September 28, 2022: 8:30am to 2:00pm (PST)- In Person & Remote**
 - Supply Side Resource Cost Assumptions, including DERs,
 - Ancillary Services and Intermittent Generation Analysis Update,
 - All-Source RFP Update,
 - Energy and Peak Forecast Update,
 - Load & Resource Balance Update.

- **TAC 7: October 12, 2022: 9am to 4pm (PST)- In Person & Remote**
 - Hydro Impacts from Global Climate Change Studies,
 - Load Impacts from Global Climate Change Studies,
 - DER Potential Assessment Study Scope for 2025 IRP,
 - Clean Energy Implementation Plan Update & Customer Benefit Indicator's in the IRP,
 - Final Wholesale Natural Gas and Electric Price Forecast,
 - Discuss portfolio and market scenarios options.

- **Technical Modeling Workshop: October 20, 2022, 9am to 12pm (PST)- Remote Only**
 - PRiSM model overview,
 - Risk Assessment overview,
 - Washington use of electricity modeling.

- **Progress Report Workshop: December 14, 2022, 9am to 10:30am (PST)- Remote Only**
 - Review Washington IRP Progress Report

- ***Virtual Public Meeting- Natural Gas & Electric IRP (March 8, 2023)***
 - Recorded presentation
 - Daytime comment and question session (12pm to 1pm- PST)
 - Evening comment and question session (5:30pm to 6:30pm- PST)

- **TAC 8: March 15, 2023: 9am to 4pm (PST)- In Person & Remote**
 - RFP Update,
 - Wholesale Market Scenario Results,
 - Final Preferred Resource Strategy,
 - Market risk assessment,
 - Portfolio scenario analysis,
 - Final report overview & comment plan,
 - Action Items.

2023 Electric IRP Report Outline

This section provides a draft outline of the expected major sections in the 2023 Electric IRP.

- 1. Executive Summary**
- 2. Introduction, Stakeholder Involvement, and Process Changes**
- 3. Economic and Load Forecast**
 - a. Economic Conditions
 - b. Avista Energy & Peak Load Forecasts
 - c. Load Forecast Scenarios
- 4. Existing Supply Resources**
 - a. Avista Resources
 - b. Contractual Resources and Obligations
 - c. Customer Generation Overview
- 5. Long-Term Position**
 - a. Regional Capacity Requirements
 - b. Energy Planning Requirements
 - c. Reserves and Flexibility Assessment
- 6. Transmission Planning & Distribution**
 - a. Overview of Avista's Transmission System
 - b. Future Upgrades and Interconnections
 - c. Transmission Construction Costs and Integration
 - d. Merchant Transmission Plan
 - e. Overview of Avista's Distribution System
 - f. Future Upgrades and Interconnections
- 7. Distributed Energy Resources Options**
 - a. Energy efficiency potential
 - b. Demand response potential
 - c. Supply side resource options
 - d. Named Community Actions
- 8. Supply Side Resource Options**
 - a. New Resource Options
 - b. Avista Plant Upgrades
 - c. Non-Energy Impacts
- 9. Market Analysis**
 - a. Wholesale Natural Gas Market Price Forecast
 - b. Wholesale Electric Market Price Forecast
 - c. Scenario Analysis
- 10. Preferred Resource Strategy**
 - a. Preferred Resource Strategy
 - b. Market Exposure Analysis
 - c. Avoided Cost
 - d. Customer Benefit Indicator Impact
- 11. Portfolio Scenarios**
 - a. Portfolio Scenarios
 - b. Market Scenario Impacts
- 12. Action Plan**

Draft IRP will be available to TAC members on March 17, 2023. Comments from TAC members are expected back to Avista by May 12, 2023. Avista’s IRP team will be available for conference calls or by email to address comments with individual TAC members or with the entire group if needed.

Exhibit 1: 2023 Electric IRP Timeline

<u>Task</u>	<u>Target Date</u>
Update and finalize energy & peak forecast	May 2022
Transmission & distribution studies complete	June 2022
Identify Avista’s supply resource options	July 2022
Finalize demand response options	July 2022
Finalize energy efficiency options	July 2022
Finalize natural gas price forecast	August 2022
Finalize electric price forecast	October 2022
Determine portfolio & market future studies	October 2022
Due date for study requests from TAC members	October 1, 2022
Finalize PRiSM model assumptions	October, 2022
Simulate market scenarios in Aurora	November 2022
Portfolio analysis	February 2022
Writing Tasks	
Finalize 2023 IRP Work Plan	January 15, 2022
Washington IRP Progress Report	January 3, 2023
External draft released to the TAC	March 31, 2023
Public Comments from TAC due	May 12, 2023
Final IRP submission to Commissions and TAC	June 1, 2023

Exhibit 2: Public Data Release Schedule

<u>Task</u>	<u>Targeted Release</u>
Draft Peak & Energy Load Forecast	May 2022
Supply Side Resource Options	June 2022
Energy Efficiency Potential Study	July 2022
Demand Response Potential Study	July 2022
Transmission Interconnect Costs	July 2022
Supply Side Resource Options Cost	September 2022
Wholesale Natural Gas Price Forecast	August 2022
Wholesale Electric Price Forecast	September 2022
Final Peak & Energy Load Forecast	September 2022
Climate Change Impact Study Data	October 2022
Load scenario Data	October 2022
Draft PRiSM model	November 2022
PRS PRiSM model & Results	February 2023
Final PRiSM model & Results	March 2023
